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PartG

of the building regulations

Sanitation, Hot Water and Water Efficiency (formerly Hygiene)



Your guide...

to the new requirements for hot water safety and water efficiency in the bathroom.

On 1 October 2009, the government will introduce new legislation within Part G of the Building Regulations that will impact bathroom installations in new build properties.

Bristan, the UK's brand leader for taps and showers, has developed this guide to provide you with an explanation of these changes plus advice on how you can ensure compliance with the new requirements of Part G.

What changes are covered in the new Part G?

1. Baths in new homes must be fitted with a protective device to ensure that the temperature from the outlet does not exceed 48°C.
2. A new water efficiency standard of 125 litres per head per day (l/h/d) for new homes has also been introduced. Currently, it is estimated that the average person uses around 150 litres of water a day. To meet the 125 l/h/d standard, water efficient products will need to be installed.



What buildings do these particular changes cover?

- ✓ New dwellings
- ✓ New dwellings created by a change of use of an existing building
- ✗ Refurbishments



water safety

Why do we need to limit bath water temperatures to 48°C?

Every year around 20 people die and almost 600 are seriously injured from scalds caused by hot water, with children and the elderly most at risk. The danger of scalding occurs because, in order to prevent the growth of harmful legionella bacteria, hot water must be stored at 60°C or above. However, at this temperature, healthy adult skin can be scalded with third degree burns in only five seconds.

The new Part G of the Building Regulations includes measures to help reduce the number of incidences of scalding by requiring that all baths in new dwellings have a device fitted that limits the temperature to a maximum of 48°C. This is considered a safer temperature for adults and will help prevent these unnecessary deaths and injuries.

Comply without changing your existing specification

A thermostatic under bath blending valve can be used with any bath filler, tap or bath shower mixer so there's no need to change the architecture of the current specification.

While the introduction of thermostatic controls to bath outlets in the new Part G only covers new dwellings, Bristan and our sister company, Sirrus by Gummerts, advise that thermostatic bath fillers, bath shower mixers or mixing valves should be installed as standard practice for any bathroom refurbishment.



What is the best way of limiting bath water temperatures?

Bristan offers a range of thermostatic bath fillers and bath shower mixers which limit temperatures to below the required maximum of 48°C, to help you comply with the new requirements of Part G.

The Artisan Thermostatic Bath Filler and the Artisan and Design Utility Thermostatic Bath Shower Mixers are all dual control mixers allowing the on/off function to be operated with one handle and the required water temperature to be selected with the other. All have a built-in thermostat which is as close to the outlet as possible as preferred by Part G and a fixed maximum outlet temperature of 46°C allowing for a +/- 2°C tolerance. Most models also have a safety stop pre-set to 38°C for even safer bathing.



Artisan
bath shower mixer



Artisan
bath filler



Utility Club
bath shower mixer



Utility Lever
bath shower mixer



Utility Cross Head
bath shower mixer

Bristan's sister company Sirrus by Gummerts is a leading British manufacturer of commercial water controls.

Established in 1861, Sirrus offers an extensive range of TMVs including the T48 15mm and 22mm thermostatic blending valves which are factory pre-set to 46°C allowing for a +/- 2°C tolerance, to comply with the requirements of Part G with no need to calibrate on site. Tested at Sirrus by Gummerts' Midlands-based plant, the T48 valves offer the peace of mind that if water pressures or temperatures fluctuate, the temperature at the outlet will remain stable. Smart engineering also means that the valve will shut off in the event of hot or cold water failure. The T48 is suitable for all plumbing systems.

water efficiency

Why is the government asking us to reduce the amount of water we use?

Many of us link water shortage to famine in developing countries but the threat affects everyone, including us here in the UK. Despite all of our wet weather, hosepipe bans are a regular occurrence in summer months and there's a very serious concern of water scarcity in the future.

The new Water Efficiency Standard aims to help prevent the threat of water shortage by setting a new maximum water usage of 125 litres per head per day (l/h/d) for all new homes. This includes a fixed factor of water for outdoor use of 5 l/h/d. The standard applies to 'wholesome water' which is defined as 'water that is supplied to the building by a statutory water undertaker or a licensed water supplier'.

How does the new Water Efficiency Standard compare with the Code for Sustainable Homes?

Both Part G and the Code for Sustainable Homes set targets for water efficiency. Part G is set at 125, while the Code for Sustainable Homes requires different targets in order to meet the higher levels of sustainability. See table below.

Water Performance Targets for New Dwellings

Performance target	Maximum Consumption (litres/person/day)
Part G Compliance	125
Code for Sustainable Homes (Level 1/2)	120
Code for Sustainable Homes (Level 3/4)	105
Code for Sustainable Homes (Level 5/6)	80

How can I ensure the property meets the new 125 l/h/d standard?

Bristan's ecosmart collection is leading the way in water efficient bathroom products and offers a choice of sanitaryware, taps, flow limiters and showers to help you achieve the performance targets of both Part G and the Code for Sustainable Homes. Some 35 products in the collection have been approved by the Bathroom Manufacturers Association under its Water Efficient Labelling Scheme. The Prism eco-click basin mixer, Dune 2.6/4l WC and Dune low capacity bath have also been awarded the prestigious Waterwise Marque for water efficiency.

The product selector



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Basin taps



Basin mixer



= even more water savings

How should the estimated water usage of a new home be calculated?

The government has published a new Water Efficiency Calculator for new dwellings to help estimate water usage for Part G, but also to help assess the water performance targets of the Code for Sustainable Homes. To use the calculator, you'll need to check the product's water consumption details and enter them into the calculation table. In the bathroom, this includes:

- **WCs** Flushing capacity
- **Taps** Flow rate per minute (including fitted limiting devices) at 0.3MPa
- **Baths** Total capacity in litres to overflow
- **Showers** Flow rate per minute (including fitted limiting devices) at 0.3MPa at 37°C

The calculator also takes into account dishwashers, washing machines, water softeners, kitchen sink taps and waste disposal units. You can find an electronic version of the calculation table by visiting www.communities.gov. A separate calculation table should be used for calculating multiple fittings and also to assess the impact of rainwater and greywater recycling.

Where can I find out more?

See the full Part G document and water calculator at www.communities.gov and www.planningportal.gov.uk.

To find out more information on water saving products visit www.bristan.com/ecosmart

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